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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,625	10/20/2003	Hiroyuki Kawamoto	244149US2	1788
22850	7590	12/13/2007		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER WOLDEMARIAM, AKILILU K	
			ART UNIT	PAPER NUMBER
			2624	
			NOTIFICATION DATE	DELIVERY MODE
			12/13/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/687,625	KAWAMOTO ET AL.	
	Examiner	Art Unit	
	Aklilu k. Woldemariam	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on 10/11/2007 has been entered. Claims 1-7 have been amended. Claims 1-7 are still pending, with claim 1 being an independent.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 2, 3 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki (U.S. Patent number 7, 009, 722 B1) in view of Hiroshi (Japan Publication number 2000-032241).

Regarding claim 1, Nishigaki discloses an image processing apparatus (see fig.2) comprising an image storage unit configured to store a plurality of types of image data in a first data format that is compressed (see column 2, lines 7-11 and column 3, lines 23-27 and 42-44 and column 4, lines 434-39); a data format converter configured to convert the first data format of the image data to a second data format being a general data format (see fig.1A and B and column 2, lines 24-41).

Nishigaki does not disclose **a communicator including a communication interface that transmits configured to transmit the image data of the first data**

format together with the image data of the second data format as reference image data for the image data of the first data format to an external device.

Hiroshi discloses **a communicator including a communication interface that transmits configured to transmit the image data of the first data format together with the image data of the second data format as reference image data for the image data of the first data format to an external device** (see abstract and paragraph [0016] and [0018]).

It would have been obvious to someone of the ordinary skill in the art at the time when the invention was made to use Hiroshi's a communicator including a communication interface that transmits configured to transmit the image data of the first data format together with the image data of the second data format as reference image data for the image data of the first data format to an external device in Nishigaki's an image processing apparatus because it will allow to improve the speed of data processing technique, with scanner equipment and is stored up in large capacity storage, [Hiroshi's, see paragraph [0003]).

Regarding Claim 2, Hiroshi discloses the image processing apparatus (see item 11, drawing 1) **according to claim 1, wherein the data format converter comprises an expander configured to expand the image data stored in the image storage unit** (see paragraph [0022] and [0023]); **a multinary unit configured to convert image data expanded of low bits to multinary image data** (see abstract and paragraph [0011]); **and a data compressor configured to compress the multinary**

image data into a multinary general compression format (reference) (see abstract and paragraph [0011]).

Regarding Claim 3, Horishi discloses the image processing apparatus (see item 11, drawing 1) according to claim 1, wherein the data format converter comprises an expander configured to expand the image data stored in the image storage unit (see paragraph [0022] and [0023]); a binary unit configured to convert the image data expanded, which is monochrome multinary image data, to binary image data (see paragraph [0022] and [0023]); and a data compressor configured to compress the binary image data in a binary general compression format (see abstract and paragraph [0022] and [0023]).

Regarding Claim 7, Horishi discloses the image processing apparatus (see item 11, drawing 1) according to claim 1, further comprising an imaging unit configured to form an image on a recording medium based on the image data stored in the image storage unit (see drawing 1 and paragraph [0011]), wherein a printing function is combined with the imaging unit to adapt the first data format of the image data stored in the image storage unit to a data format used in the imaging unit (see drawing 1, abstract and paragraph [0011], and [0016]).

4. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishigaki in view of Horishi as applied to claim 1, above, and further in view of Kato (U.S. Publication number 2001/0012397 A1).

Regarding Claim 4, Horishi discloses the image processing apparatus (see item 11, drawing 1) according to claim 1, wherein the data format converter (see abstract and paragraph [0022] and [0023]) comprises.

Horishi does not disclose a color space converter configured to convert a color space of the image data stored in the image storage unit, which is color multinary image data, to a general color space.

Kato discloses a color space converter configured to convert a color space of the image data stored in the image storage unit, which is color multinary image data, to a general color space (see fig.18 and abstract and paragraph [0102], [0104] and [0151]).

It would have been obvious to someone of the ordinary skill in the art at the time when the invention was made to use Kato's a color space converter configured to convert a color space of the image data stored in the image storage unit, which is color multinary image data, to a general color space in Horishi's an image processing apparatus because it will allow to reduce the memory capacity and the transmission data volume, [Kato, see paragraph [0004]).

Regarding Claim 5, Kato discloses the image processing apparatus (see fig.5) according to claim 1, wherein the data format converter comprises at least one resolution converter of a multinary resolution converter configured to perform resolution conversion on the image data stored in the image storage unit, which is multinary image data (see fig.22 and 23, paragraph [0164] and [0178]); and a binary resolution converter that performs configured to perform

resolution conversion on binary image data (see fig.22 and 23, paragraph [0164] and [0178]).

Regarding Claim 6, Kato discloses the image processing apparatus (see fig.5) **according to claim 5, wherein the at least one resolution converter is configured to perform resolution conversion on image data at a conversion rate such that resolution of the image data as a base of conversion** (see paragraph [0099], [0120], [0137] and [0178]) **and a resolution after the conversion are fall into a predetermined range** (see item 231, fig.22 and [0164]).

Response to Arguments

5. Applicant's arguments filed on 10/11/2007 have been respectfully considered, they are persuasive. Regarding 35 U.S.C. 103 rejection of claim 1, the applicant's argued that with references (Nishigaki, Imaizumi and Kato) do not disclose the claim 1 **limitation, "communicator including a communication interface that transmits configured to transmit the image data of the first data format together with the image data of the second data format as reference image data for the image data of the first data format to an external device."** The examiner agrees that Nishigaki, Imaizumi and Kato do not disclose this claim limitation. However, Hiroshi discloses a **communicator including a communication interface that transmits configured to transmit the image data of the first data format together with the image data of the second data format as reference image data for the image data of the first data format to an external device** (see abstract and paragraph [0016] and [0018]).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aklilu k. Woldemariam whose telephone number is 571-270-3247. The examiner can normally be reached on Monday-Thursday 6:30 a.m-5:00 p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

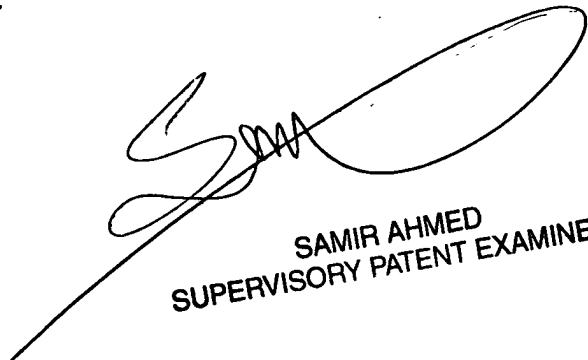
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Samir Ahmed
SPE
Art Unit 2624

A.W.
12/06/2007



SAMIR AHMED
SUPERVISORY PATENT EXAMINER